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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/436,520	11/09/1999	CLARENCE D. CHANG	10054-2	6761

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EXAMINER

ILDEBRANDO, CHRISTINA A

ART UNIT	PAPER NUMBER
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1725

24

DATE MAILED: 04/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/436,520

Applicant(s)

CHANG ET AL.

Examiner

Christina Ildebrando

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1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 11 is/are allowed.
- 6) ☐ Claim(s) 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 24
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/10/03 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 9-10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 9-10 recite the limitation "MCM-22 having an alpha value greater than about 170." The specification as originally filed does not provide any support for the recited alpha value. The specification does not recognize or discuss the alpha value of MCM-22 and does not provide any support for the endpoint value claimed. Also, the Declaration filed 3/10/03 fails to establish that the applicant had possession of the

concept of an MCM-22 zeolite having an alpha value greater than about 170 at the time the invention was made.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Del Rossi et al.

Del Rossi et al. (US 5,108,969) discloses a catalyst composition useful in hydrocarbon conversion processes. The reference teaches and claims an MCM-22 zeolite having a group VIII metal and tin thereon (column 8, lines 37-46 and claim 1). Suitable group VIII metals include the group VIII noble metals such as palladium (column 8, lines 10-20).

With regards to the limitation "ruthenium," the reference does not specifically teach the metal ruthenium but instead teaches the use of Group VIII metals. It has been held that when the compound is not specifically named, but instead it is necessary to select portions of teachings within a reference and combine them, e.g. select various substituents from a list of alternatives given for placement at specific sites on a generic chemical formula to arrive at a specific composition, anticipation can only be found if the

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classes of substituents are sufficiently limited or well delineated. *Ex parte A*, 17USPQ2d 1716. If one of ordinary skill in the art is able to "at once envisage" the specific compound within the generic chemical formula, the compound is anticipated. One of ordinary skill in the art must be able to draw the structural formula or write the name of each of the compounds included in the generic formula before any of the compounds can be "at once envisaged." Refer also to *In re Schauman*, 197 USPQ 5 and MPEP 2131.02.

It is the position of the examiner that the teachings of the reference are drawn to a class of metals sufficiently limited to constitute anticipation. It is considered that one of ordinary skill would have been able to at once envision ruthenium as a group VIII metal taught by the reference.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Del Rossi et al.

Del Rossi et al. is applied as described above.

If in fact it is considered that the reference does not disclose the claimed composition with respect to the metal ruthenium with sufficient specificity to constitute anticipation, it is the position of the examiner that the claims would have been obvious

to one of ordinary skill in the art. If the prior art does not in fact anticipate the instant claims, then the claims would have been obvious to one of ordinary skill in the art. *Ex parte Lee*, 31 USPQ 2d. 1105.

In this case, Del Rossi et al. does not disclose the use of the specific metal, ruthenium but teaches the generic group of compounds, "Group VIII metals". The claims differ from the reference by reciting a specific species and a more limited genus than the reference. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to select any of the species taught by the reference, including those of the claims, because an ordinary artisan would have the reasonable expectation that any of the species of the genus would have similar properties and, thus, the same use as the genus as a whole.

***Allowable Subject Matter***

8. Claim 11 is allowed.
9. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a catalyst composition comprising ruthenium, tin and a material selected from PSH-3, SSZ-25, MCM-36, MCM-49, or MCM-56, having the XRD pattern instantly claimed.

***Response to Arguments***

10. Applicant's arguments filed 3/10/03 with regards to the Del Rossi et al. reference have been fully considered but they are not persuasive.

Applicant argues that the Del Rossi patent describes a zeolite which has been modified to reduce the acidity and that the present invention does not mention or require any treatment to reduce the Alpha value of the zeolite. However, there is nothing in the instant specification or claims which would preclude using a zeolite with a reduced Alpha value. The claims are open to the use of a zeolite having any Alpha value.

Applicant argues that a catalyst with reduced Alpha value would be unsuitable for the hydroalkylation of aromatic compounds. However, the instant claims are not directed towards a hydroalkylation process but a catalyst composition. Differences in the intended use of the composition are not sufficient to patentably distinguish the instant claims from the teachings of the prior art. It is also noted that there is no evidence to support applicant's assertion that a catalyst with reduced alpha value would be unsuitable for the hydroalkylation of aromatic compounds.

11. The Declaration under 37 CFR 1.132 filed 3/10/03 is insufficient to overcome the rejection of claims 7-11 based upon Del Rossi et al. as set forth in the last Office action because: The declaration is not applicable to the issues at hand. The Declaration states that there is no motivation to modify the Del Rossi patent by removing a specific restriction on the alpha value. However, the examiner does not propose to removing the requirement of the alpha value. It is the position of the examiner that the instant claims

do not preclude using a zeolite having the alpha value taught by Del Rossi et al. Further the Declaration fails to provide any support for the range of values instantly claimed.

**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Ildebrando whose telephone number is (703) 305-0469. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (703) 308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

CAI  
April 9, 2003

  
TOM DUNN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700